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WHAT IS CLAIMED IS:

1.   A computer implemented method of controlling a physical system responsive to a drive to produce a selected output, the method comprising:

      defining a virtual identity system which includes the physical system and a form of a model of the physical system stored in a computer;

      providing a ~~for receiving the~~ drive to the physical system initiated by the computer;

      receiving ~~provide~~ an actual output from the physical system indicative of a measured physical parameter;

      checking a quality of identity of the virtual identity system using at least a function of the actual output ~~and~~ and the form of the model stored on the computer; and

      controlling the physical system using the computer as a function of checking the quality of identity of the virtual identity system.